

A1  
4 means for modifying the feature vector for the document based on user actions captured  
5 during a search session so that the document is more highly ranked in response to the user  
6 actions.

1 2. (Amended) The system of Claim 1 further comprising means for capturing user  
2 actions in response to a list of documents produced in response to a query wherein the user  
3 actions include selecting a document from the list of documents.

A2  
1 4.(Amended) A method for user behavior based ranking of a document, comprising:  
2 determining a feature vector associated with a document, the feature vector comprising  
3 weights for one or more terms that appear in the document; and  
4 modifying the feature vector for the document based on user actions captured during a  
5 query of the document so that the document is more highly ranked in response to the user  
6 actions.

1 5.(Amended) The method of Claim 4 further comprising means for capturing user  
2 actions in response to a list of documents produced in response to a query wherein the user  
3 actions include selecting a document from the list of documents.

A3  
1 7.(Amended) A system for user behavior based searching of a document based on a  
2 query having one or more query terms, comprising:  
3 means for determining a feature vector associated with a document, the feature vector  
4 comprising weights for certain terms that appear in the document;  
5 means for modifying the feature vector for the document based on user actions captured  
6 during a query of the document so that the document is more highly ranked in response to the  
7 user actions; and

8 means for returning the same document to another user with the same query at a higher  
9 ranking due to the modified feature vector.

A3  
1 8. (Amended) The system of Claim 7 further comprising means for capturing user  
2 actions in response to a list of documents produced in response to a query wherein the user  
3 actions include selecting a document from the list of documents.

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A4  
1 10. (Amended) A method for user behavior based searching of a document based  
2 on a query having one or more query terms, comprising:

3 determining a feature vector associated with a document, the feature vector comprising  
4 frequency values for one or more terms that appear in the document;

5 modifying the feature vector for the document based on user actions captured during a  
6 query of the document so that the document is more highly ranked in response to the user  
7 actions; and

8 returning the same document to another user with the same query at a higher ranking due  
9 to the modified feature vector.

1 11. (Amended) The method of Claim 10 further comprising means for capturing user  
2 actions in response to a list of documents produced in response to a query wherein the user  
3 actions include selecting a document from the list of documents.

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Please add new Claims 13- 26:

1 13. A computer implemented method for user behavior based ranking of a document,  
2 the method comprising:

3 ranking a document based on a feature vector of the document, the feature vector  
4 comprising frequency values for one or more terms that appear in the document;  
5 sampling user search behavior; and  
6 updating the feature vector of the document based on the sampled user search behavior so  
7 that the rank of the document is changed based on the user sampled user search behavior.

1 14. The method of Claim 13, wherein the sampling further comprises generating a  
2 sample of the user behavior wherein the sample of the user behavior further comprises a query  
3 feature vector of the terms in a particular query and the feature vector of the one or more  
4 documents returned based on the query and viewed by the user.

1 15. The method of Claim 14, wherein the sample generating further comprises  
2 generating a sample during a sampling frequency.

1 16. The method of Claim 13, wherein the updating further comprises combining the  
2 feature vector of the document with a feature vector of the query, the feature vector comprising  
3 frequency values for one or more terms that appear in the query.

1 17. The method of Claim 16, wherein the updating further comprising scaling the  
2 query feature vector based on the viewing time of the document by the user during the sampled  
3 user behavior to generate a scaled query feature vector.

1 18. The method of Claim 17, wherein the scaling further comprises generating a  
2 negative scaling factor in response to a short viewing time so that the scaled query feature vector

3 is negative and the feature vector of the document is reduced and the rank of the document is  
4 reduced.

1 19. The method of Claim 17, wherein the scaling further comprises generating a  
2 positive scaling factor in response to a long viewing time so that the scaled query feature vector  
3 is positive and the feature vector of the document is increased and the rank of the document is  
4 increased.

1 20. A computer implemented system for user behavior based ranking of a document,  
2 the system comprising one or more computer instructions, the system comprising:  
3 instructions for ranking a document based on a feature vector of the document, the  
4 feature vector comprising frequency values for one or more terms that appear in the document;  
5 instructions for sampling user search behavior; and  
6 instructions for updating the feature vector of the document based on the sampled user  
7 search behavior so that the rank of the document is changed based on the user sampled user  
8 search behavior.

1 21. The system of Claim 20, wherein the sampling further comprises instructions for  
2 generating a sample of the user behavior wherein the sample of the user behavior further  
3 comprises a query feature vector of the terms in a particular query and the feature vector of the  
4 one or more documents returned based on the query and viewed by the user.

1 22. The system of Claim 21, wherein the sample generating further comprises  
2 instructions for generating a sample during a sampling frequency.

1 23. The system of Claim 20, wherein the updating further comprises instructions for  
2 combining the feature vector of the document with a feature vector of the query, the feature  
3 vector comprising frequency values for one or more terms that appear in the query.

1           24.    The system of Claim 23, wherein the updating further comprising instructions for  
2    scaling the query feature vector based on the viewing time of the document by the user during  
3    the sampled user behavior to generate a scaled query feature vector.

AS 1           25.    The system of Claim 24, wherein the scaling further comprises instructions for  
2    generating a negative scaling factor in response to a short viewing time so that the scaled query  
3    feature vector is negative and the feature vector of the document is reduced and the rank of the  
4    document is reduced.

1           26.    The system of Claim 24, wherein the scaling further comprises instructions for  
2    generating a positive scaling factor in response to a long viewing time so that the scaled query  
3    feature vector is positive and the feature vector of the document is increased and the rank of the  
4    document is increased.